

Title (en)
Rotary actuator

Title (de)
Drehantrieb

Title (fr)
Actionneur rotatif

Publication
EP 0713012 A2 19960522 (EN)

Application
EP 95117876 A 19951113

Priority

- JP 30960894 A 19941119
- JP 3901895 A 19950202
- JP 9447295 A 19950327
- JP 12092295 A 19950421
- JP 15706095 A 19950530

Abstract (en)
Disclosed is a rotary actuator utilizing magnetic screws which are stably rotatable at a great torque with little torque variation. The rotary actuator comprising (a) a closed hollow cylinder, a piston sliding within the cylinder, and a rotary shaft which rotates with the sliding of the piston, has (b) a first magnetic screw member which makes a linear motion in synchronism with the sliding of the piston, and is provided with a first spiral magnetized band, and (c) a rotary shaft rotatably supported in relation to the first magnetic screw member, and having a second magnetic screw provided with a second spiral magnetized band. (d) With the sliding of the piston, the second magnetic screw receives the magnetic force from the first magnetic screw to thereby rotate the rotating shaft. <IMAGE>

IPC 1-7
F15B 15/06

IPC 8 full level
F15B 15/06 (2006.01)

CPC (source: EP US)
F15B 15/061 (2013.01 - EP US); **F15B 15/068** (2013.01 - EP US); **Y10T 74/18568** (2015.01 - EP US); **Y10T 74/19712** (2015.01 - EP US)

Citation (applicant)

- JP S6044607 A 19850309 - CKD CORP
- JP S62162401 U 19871015
- JP S6246005 A 19870227 - CKD CORP

Cited by
CN102204068A; CN105408649A; EP0822644A1; EP1884402A1; CN109723696A; WO2010026427A3; US9124167B2; US11296589B2

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0713012 A2 19960522; EP 0713012 A3 19970924; US 5634390 A 19970603

DOCDB simple family (application)
EP 95117876 A 19951113; US 54825895 A 19951025